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HOW THE GOVERNMENT MONITORS INDIRECT COSTS

INTRODUCTION

The DoD Federal Acquisition Supplement (DFARS) sets forth a very clear policy relating to the DoD approach for ensuring that managerial attention is focused on contractor indirect costs by both the contractor and the government. It strongly emphasizes that defense contractors are responsible for managing and controlling their own indirect costs. DoD's objective is to systemically monitor how the contractor plans and controls these costs and to conduct sufficient tests of the contractor's control system to ensure that the costs are effectively managed. Individual indirect expenses at contractor facilities simply cannot be monitored by government personnel due to the sheer volume of the business transactions involved. Thus, the focus of DoD monitoring activities is on the policies, procedures, and practices used by individual contractors in controlling their indirect costs. The bottom-line objective of DoD personnel in the final analysis is to ensure that DoD pays only its fair share of indirect costs that are allocated to government flexibly priced contracts.

Within the government, the monitoring of indirect cost is a major activity of the contract administration function (defined in FAR Part 42). The organization primarily responsible for contract administration within DoD is the Defense Contract Management Command (DCMC). This organization is in effect an extension of program offices at contractor plants. The DCMC has recently concentrated top management attention toward addressing the moni-

toring of indirect costs and has been aggressively pursuing a major command initiative of "Overhead Management." DCMC, as well as many major program managers, has become very concerned with the increasing level of indirect costs throughout the defense industry. "Program affordability" has become the managerial keyword for the continuation of major defense programs as the defense procurement budget declines. In addition to the overall industry issue of a declining business base that drives increases in indirect rates, many contractors have been experiencing extraordinary changes in their corporate structures due to merger, acquisition, restructuring, and consolidation activities. In the short run, these significant organizational changes tend to increase indirect costs. In addition to the structural changes, determining the responsible party for paying for expensive environmental cleanup costs has become a major indirect cost issue at senior levels within the acquisition community. So a very complex area of contract management has become even more complicated. Since the DCMC is the DoD organization responsible for determining whether indirect costs are reasonable, allowable, and allocable, it must resolve these issues in the process of negotiating indirect rates with numerous defense contractors.

Government and industry are very different in terms of how they assign the responsibility for the monitoring of indirect costs. In industry, as we have explained in detail earlier, the monitoring of indirect cost is essentially a financial management function. But in the government the function primarily falls under the heading of contract management.

To come to grips with the increasingly complicated area of monitoring indirect cost and to address the concerns of program managers, who have experienced significant increases in indirect rates, the DCMC has recently established an Overhead Center to assist administrative contracting officers (ACOs) in the indirect cost arena.

DCMC OVERHEAD CENTER OF EXCELLENCE

DCMC management realized that the issues involving the allowability and allocability of indirect costs had become so complicated that defense contractors when negotiating with the government would typically bring in professional outside consultants to address some of the issues related to mergers, acquisitions, reorganizations, pensions, environmental pollution, and other specific issues. Unfortunately, there was no place within DCMC for contract management personnel to obtain such professional advice and guidance related to many of these emerging issues. In addition, DCMC was very concerned with ensuring that defense contractors received consistent treatment from the government in negotiating the very large and complex issues involving indirect cost. Consequently, DCMC established an Overhead Center to provide contract management personnel with a central place for obtaining policy advice and guidance related to indirect cost matters. The center is responsible for bringing a national focus to indirect cost issues, performing research and analysis to support field negotiation, anticipating emerging issues and acting to influence DoD policy, providing timely information to program offices, review of precedent setting issues (especially those involving the cost accounting standards and cost principles), research and analysis of Armed Services Board of Contract Appeals (ASBCA) and Court of Claims legal decisions for supporting negotiations, analysis of negotiation results to derive "lessons learned" for future negotiations, and maintaining a core capability for performing overhead "should cost" reviews. We will discuss "should cost" reviews in more detail when we examine government monitoring techniques.

The Overhead Center is staffed with a small group of specialists in such areas as business reorganizations, pensions, cost accounting standards, cost principles, independent research and development, bid and proposals, electronic data processing, and actuarial science. Essential industrial engineering and legal support is provided to the Overhead Center on a matrix basis at DCMC Headquarters. Certain specialized review teams operating in the field, such as insurance, pension, and purchasing now report directly to the center. Later we will discuss the functions performed by these specialized review teams.

RELATIONSHIP TO PROGRAM OFFICES

In the monitoring of indirect costs by the DCMC, great reliance is placed on program offices to help establish a realistic forecast of the business base. Program offices are in an excellent position to provide current information (such as quantity forecasts, delivery schedules, requirement changes, production options, and time phased estimates) that is invaluable for negotiating indirect cost allocation bases with defense contractors. Program managers should make special efforts to assist the government monitoring team in any possible way and should work toward strengthening the monitoring process by improving the management visibility related to their programs. As an absolute minimum, information requested by DCMC from program managers should provide valuable information for an independent "sanity check" on estimates received from contractors.

Program offices should to be very actively involved in the government's monitoring process in order to ensure that their contractors are adequately controlling indirect costs. It is essential that they be very familiar with their contractor's indirect cost structure in order to understand programmatic functions related to cost estimating, pricing, negotiating, and cost reporting.

GOVERNMENT TEAM

Procurement Contracting Officer (PCO)

The PCO is the government's legal representative and is the individual with the authority to award, administer, and terminate government contracts. However, certain responsibilities of the PCO can be delegated to authorized representatives. It is customary after award of major defense contracts for the PCO to delegate responsibility for administration of the contract to an administrative contracting officer (ACO). In so doing, the PCO still retains overall control of contracts. The ACO supports the PCO by obtaining timely and accurate information about numerous contractor operations. This support is especially valuable in the indirect cost area because indirect rates are of major interest to the PCO for contract negotiation purposes. It is essential that continuing liaison be maintained between the PCO and the ACO during the entire life of contracts.

Administrative Contracting Officer (ACO)

The contract administration responsibility delegated to the ACO includes many general business-oriented functions. Overall, the FAR identifies some 60 contract administrative functions that may be delegated to various personnel working in the field. Some functions relevant to the area of indirect costs include negotiating indirect rates to be used for government contracting purposes, negotiating advance agree-

ments, reviewing rates as indirect costs are incurred, analyzing historical indirect costs trends, analyzing variances between incurred costs and actual costs, determining reasonableness of indirect costs, and determining the adequacy of contractor's accounting systems. In practice, the monitoring of indirect cost involves every activity ongoing at a defense contractor's plant. All activities are in some way included in forecasted operations as either a direct or indirect cost. Therefore, of necessity the monitoring of indirect cost must be a team effort. The team leader for the government monitoring efforts is the ACO, who usually is located on-site at the contractor's plant. The ACO is responsible for coordinating the efforts of many government specialists in residence at the contractor's plant, as members of the government team.

Cost Monitor

In some cases, DoD requires (under provisions of DFARS 242.70) that a formal program of cost monitoring be established. Generally, a formal program is required when sales to the government during a contractor's next fiscal year are expected to exceed \$100M for other than firm-fixed-price and fixed-price with escalation contracts or when the government's share of indirect costs is at least one-half of the contractor's total indirect costs. For contractor locations falling under this requirement, a cost monitor is assigned and is the designated individual responsible for monitoring indirect cost. The cost monitor works for the ACO and is responsible for monitoring the entire contractor management control system from forecasting through final settlement of actual indirect rates. In addition to supporting the ACO in the review and evaluation of contractor indirect rates. the cost monitor identifies areas of indirect costs that are candidates for an in-depth review by the government monitoring team. We will discuss these reviews later when we cover the various techniques used by the government in its monitoring efforts. DCMC also has individuals who are designated as regional cost monitoring specialists, who have the responsibly for providing guidance and ensuring consistency in the monitoring of indirect costs at contractor operations located in their respective regions. A DFARS case was recently submitted that could change the responsibility of the cost monitor relating to the monitoring of policies, procedures, and practices used by contractor to control direct and indirect costs at major contractor locations.

Corporate Administration Contracting Officer/Defense Corporate Executive (CACO/DCE)

Contractors with more than one business segment frequently have various corporate-wide policies, procedures, and plans that necessitate government review and negotiation of certain indirect costs at the corporate headquarters level. For example, pension plans, health care plans, insurance programs, independent research and development programs, bid and proposal programs, executive compensation plans, union agreements, foreign operations, and taxes may be managed at the corporate level. In addition, some corporations operate with centralized management control and may have considerable decision-making authority at the corporate level. The related indirect costs at the corporate level must be allocated on some reasonable basis to the business segments. Such indirect cost allocations often involve large, complex costs collected at intermediate group as well as at corporate offices. Today, in the declining defense environment, many large indirect costs are increasingly being managed at the corporate level (such items as restructuring activities, discontinued operations, and environmental cleanup operations). Such cost allocations significantly affect the work of many ACOs who are monitoring indirect cost at the

business segment level. In this situation, the government may designate a corporate administration contracting officer (CACO), who is responsible for contract administrative functions, including the monitoring of indirect costs, at the corporate level. The CACO ensures consistency in the various business segments performing government work and may negotiate advance agreements for certain major indirect costs. The CACO must work closely with and provide significant inputs to the ACOs located at the business segment level. In effect, the CACO is negotiating corporate indirect cost allocations on behalf of all ACOs. DCMC has recently designated defense corporate executives (DCEs) at the nine largest defense contractors. DCEs have corporate-wide responsibility and act as the DoD liaison representative with corporate management.

Defense Contract Audit Agency (DCAA)

The DCAA is the principal advisor within DoD on all financial accounting, cost accounting, and contract audit matters relating to the defense industry. Therefore, the cognizant DCAA auditor, usually located at major contractor locations, plays an important role in all matters relating to indirect costs. DCAA conducts several types of contractor management systems audits as well as pre-award audits, proposal audits, and audits at completion of contracts, all of which are instrumental in establishing indirect rates. It is important to note that DCAA operates in an advisory role in relationship to the contract management community. While the establishment of all indirect rates with major contractors is a joint effort on the part of the ACO and the DCAA, the ACO is the individual who is the final decision-maker and the individual who has the authority to negotiate rates with the contractor. An exception is that many small contractors have what are referred to as "audit-determined" rates, with the DCAA being the initial decision-maker for the government. In the case of audit-determined rates, if an agreement cannot be reached between the DCAA and a contractor, the issue is elevated to the ACO for resolution.

Other Team Members

There are many individuals usually located at contractors' plants who are members of the government monitoring team. The engineer is one of the key members. He provides the important technical capability for reviewing and evaluating direct material, direct labor, and other direct cost estimates that are contained in the contractor's indirect rate forecasts. Normally, the engineer will be very familiar with the contractor's engineering processes, manufacturing processes, work measurement system, and plant layout. He will be extremely valuable in evaluating the contractor's forecasted engineering workload, manufacturing rates, size of workforce, skill mix of employees, realization and efficiency rates, and amortization methods for special tooling and test equipment. Other government personnel who play important roles in the indirect cost monitoring process are specialists in the areas of quality, packaging, transportation, security, and government property. Again, the scope of indirect costs necessitates that monitoring efforts by the government must be a team effort. Each of the individuals on the team must do their part of the overall effort in order for the DoD to meet its objective of paying for only its fair share of the contractor's indirect costs.

MONITORING TECHNIQUES

The government's indirect cost monitoring efforts consists of several managerial techniques, including the establishing of three separate types of indirect rates to be used solely for government contracting purposes, tracking of actual rates as they are incurred, and performing several types of penetrating reviews of contrac-

tor management control systems and in-depth examinations of specific types of indirect costs.

The primary technique used by the government to ensure that it pays for only its fair share of contractors' indirect costs is to establish totally separate rates with contractors to be used for government contracting purposes. These rates are known as forward pricing, billing, and final rates. Since defense contractors usually have some unallowable costs in every indirect cost pool, all three of these rates will normally be less than the contractor's true indirect rates. First of all, forward pricing rates are developed for the pricing and negotiating of new procurements and changes to existing procurements. These rates represent estimates of anticipated future indirect costs. The second rate developed for government contracting purposes is the billing rate, which is used by the contractor to obtain payment for indirect costs incurred during the performance of contracts. Finally, actual rates are negotiated at the conclusion of the contractor's fiscal year to arrive at the final allowable cost on all cost-type contracts. All three of these rates are developed for each contractor fiscal year. Exhibit 15, "Life Cycle of Indirect Cost Rates," summarizes the three rates used for government contracting purposes. The following narrative provides an explanation of the process used by the contractor and the government in developing each of the indirect rates and the relative importance of the rates to program management personnel.

Forward Pricing Rates

Forward pricing rates, or bidding rates as they are sometimes called, are projected for each indirect pool in the contractor's cost accounting system and are used by contractors in developing cost proposals to be submitted to the government. These rates are derived from the company planning process, where the contractor projects detailed costs, direct and indirect,

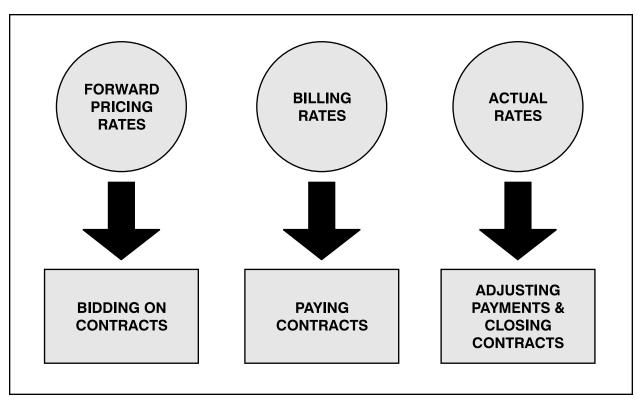


Exhibit 15. Life Cycle of Indirect Cost Rates

that will be incurred in the accomplishment of projected sales. For the direct cost, the contractor's cost estimating system will provide time-phased cost estimates for each element of direct labor, direct material, and other direct charges. These costs then will be used in a determination of the appropriate amount of indirect cost and allocation bases after adjustments are made to comply with government contracting requirements that dictate the allowability of costs. Thus, the forward pricing rate represents a projected "allowable" rate based on a total estimated business volume.

For large contractors, the ACO and the contractor will attempt to negotiate a written agreement for forward pricing rates to be used by the contractor on all proposals to the government. The resulting Forward Pricing Rate Agreement (FPRA) is very beneficial to program managers because without the agreement, all indirect rates will require separate negotia-

tions with contractors as a part of the negotiation of each contractual action. An FPRA is also very beneficial to the contractor because he can use the same rates with all government customers and does not have to separately negotiate his indirect rates with each and every customer. Since the FPRA benefits both parties, it may be requested by the procurement contracting officer, administrative contracting officer, or the contractor.

It is important to recognize that in the negotiation of forward pricing rates, the contractor has far more information available to it for estimating purposes than the government does. Therefore, the government requires the contractor to submit a detailed proposal for these business-wide costs. The government's job is then to evaluate what the contractor has proposed to them as opposed to making totally independent estimates.

A contractor's forward pricing proposal should contain the following types of data:

- projections and management assumptions relating to the business segment sales forecast;
- delineation of potential customers, specific weapons system programs, foreign military sales, and commercial sales;
- identification of any planned corporate structure changes, mergers, acquisitions, discontinuation of operations, etc.;
- estimated capital investments for plant, equipment, and tooling;
 - planned disposition of idle facilities;
- engineering workload projections, planned material requirements, manufacturing schedules, and product delivery schedules;
- time-phased breakdown of forecasted direct employees anticipated to be working on contracts, independent research and development projects, bid and proposal projects, and company capital investment projects;
- data supporting various direct cost estimating factors unique to the contractor's operations;
- estimated direct cost bases used to allocate indirect costs; and
- time-phased breakdown of forecasted indirect employees by function for each indirect cost pool.

The contractor is not required to certify cost or pricing data related to a forward pricing rate proposal. Under the Truth in Negotiations Act (TINA), the certificate that is signed in conjunction with each particular contract proposal also covers the forward pricing rates related to

that proposal. So the contractor must make efforts to ensure that the rates are kept current. Typically, a rate analysis is made at a minimum on a quarterly basis to ensure that a determination is made as to whether a revised forward pricing proposal must be submitted.

The ACO usually immediately forwards the contractor's forward pricing rate proposal to the DCAA auditor, cost monitor, and other indirect cost team members for review and analysis. Upon completion of the analysis, team members and procuring activities having significant interest will be requested to participate in developing the government's negotiation objectives and to assist in rate negotiations. During the negotiation process, the ACO may also refer complex problem areas to their regional office and to the DCMC Overhead Center for assistance. Upon completion of negotiations and the conclusion of an agreement with the contractor, the ACO forwards a copy of the FPRA to all procuring activities having a substantial amount of business with the contractor.

The FPRA will be used in the negotiation of contractual actions expected to be performed during the period covered by the agreement. In addition to indirect rates, the FPRA usually contains many factors to be used in estimating various direct cost elements. For example, based on the company's projected salary merit program and union contract terms, monthly labor rates by labor category may be agreed to with the government in advance. Other factors that are commonly negotiated in advance as part of the FPRA are factors for materials escalation. excess usage, obsolescence, scrappage, labor realization and efficiency, and certain factors of production, such as manufacturing planning, quality assurance, and test. An FPRA is very valuable to program offices because it enables them to focus their efforts on estimates of direct cost drivers that are unique to a program. Indirect rates that are applicable to all DoD

business can then be applied to the direct cost and do not require separate negotiation. Typically, an FPRA will cover the current year and at least two future years. However, the agreement provides for cancellation at the option of either party and will require the contractor to submit to the government any significant change in forecasted rates.

Of paramount importance in establishing an FPRA is the establishment of realistic projections of the volume of business that the contractor will accomplish in future years. Actually, program offices are in the best position to provide ACOs with such estimates. Major program managers can provide valuable information concerning their overall program schedule, major milestones, program time phasing, delivery schedules, follow-on buys, major modifications, foreign military sales potential, future research and development requirements, spare parts buys, and future logistical requirements. Often, the program office will have information that is more current than that available to the contractor. For example, the program office could be in the process of investigating program options due to a schedule slip necessitated by funding reallocations. The program office could provide current inputs to the ACO by validating the program strategies and assumptions made by the contractor in preparing FPRA inputs relative to their respective programs. So important is this input from program offices that ACOs may often invite representatives from major program offices to participate in actual FPRA negotiations. Unfortunately, discussion with operating personnel in the field indicates that requests for assistance from ACOs to program offices are sometimes ignored. From a program management perspective, not only should program managers assist ACOs in negotiating FPRAs but they should strongly encourage their contractors to enter into an FPRA in order to reduce the work requirements of procuring activities related to each proposed contractual action.

In some cases, it may not be possible to negotiate an FPRA. Contractors may be unwilling to negotiate because the business base is changing rapidly, significant issues may be in litigation, certain corporate or group issues are unresolved with the government, cost accounting changes are in process, or corporate merger and acquisition activities are under way. In addition, the government and the contractor may reach a negotiation impasse for many reasons. In such cases, the ACO will normally unilaterally establish forward pricing "recommended rates" (FPRRs) for use by procuring activities in negotiating future DoD requirements. In some instances, the government and the contractor may negotiate some of the rates but not all, in which case there could be a partial FPRA. It is important to note that, in addition to using the forward pricing rates for cost proposal purposes, the rates are also used for numerous cost estimating purposes and for preparing estimates at completion for contract performance reporting.

Billing Rates

Since indirect costs can only be settled with certainty at the end of the contractor's fiscal year, a different rate is needed to make cash payments to contractors for the estimated allowable indirect costs as they are being incurred. In determining the amount of "reimbursable" indirect cost, the contractor uses a billing or provisional rate. The billing rate provides a method for interim reimbursement of indirect cost at estimated rates, which are subject to final adjustment. The billing rate influences how rapidly a contractor is reimbursed for indirect expenses incurred and affects cash flow but not the price that the contractor will ultimately be paid. Billing rates are used by the contractor in submitting invoices for progress payments on fixed-price contracts as well as for cost incurred

on cost reimbursement-type contracts. If the contractor and the government cannot agree in advance on billing rates, the ACO may unilaterally determine the billing rates to be used for paying the contractor. The objective in setting the billing rate is to as accurately as possible approximate the rate for the year using actuals to date and estimates for the remainder of the year. If a significant difference between the billing rate and the actual rate to date develops, it is in the best interest of the government and the contractor to adjust the billing rate to its most likely year-end value. The billing rate considers that some indirect costs will potentially be disallowed by the government and provides for a slight margin of error in anticipating year-end actuals. The objective for the government is to develop billing rates that are set low enough to avoid overpayment to the contractor for indirect costs incurred.

It is important to keep in mind that billing rates are temporary in nature. The contractor is paid for incurred indirect cost on a temporary basis, but actual indirect rates that will be negotiated much later are permanent. An often-asked question is why it is necessary to have billing rates if you already have forward pricing rates. The answer is simply that both the government and the contractor become smarter as time passes because they are accumulating actual experience for indirect costs incurred in each overhead pool and actual experience for each direct cost allocation base. As the year progresses, the billing rate becomes a far more accurate basis for paying the contractor for indirect costs incurred than a forward pricing rate would be.

Final Rates

The third and last type of indirect rate used solely for government contracting purposes is the final rate, which cannot be negotiated until some time after the end of the company fiscal year. In practice, this rate is often referred to as

the "year-end actuals." Within 90 days after the end of its fiscal year, the contractor is required to submit its final indirect rate proposal. In conjunction with the submission, DoD contractors are required to certify that all costs included in the proposal are allowable in accordance with contract requirements and DoD cost principles. DFAR 231.7042.709 provides that penalties may assessed if a contractor claims a cost in an indirect cost proposal that is expressly unallowable or mutually agreed to be unallowable. These unallowable costs are those costs that are specifically called out as unallowable by law, regulation, or contractual provision. The ACO is responsible for determining whether or not a penalty will be assessed. Penalties, which were initiated by Congress, can be very severe as they may be as much as two times the amount of the unallowable cost in addition to the amount of unallowable cost plus interest. For example, if a contractor included \$1M of expressly unallowable cost in its proposal, it could conceivably cost the company \$3M plus interest.

The contractor's final indirect rate proposal is reviewed and analyzed by the cost monitor and the DCAA for allowability of actual costs and recommendations are made to the ACO for negotiating final rates. These reviews are often referred to as incurred cost reviews. The ACO will evaluate all recommendations made by the cost monitor and DCAA, and it is the ACO who has the responsibility for negotiating "fair and reasonable" final rates. Recall, however that the CACO must negotiate final amounts relating to corporate level indirect costs, which are allocated to the business segments. Upon completion of negotiations, a written final indirect cost rate agreement is signed by the contractor and the government. The agreement will be automatically incorporated into contracts in accordance with the "allowable cost and payment" clause. Final indirect rates may be established by the method of audit determination at some smaller contractor operations that were not specified for ACO determination. If an agreement cannot be reached between the contractor and the government, such disagreements will be considered to be a dispute within the meaning of the disputes clause in the contract. It should be noted that time delays are often encountered before final rates are agreed to, therefore billing rates may be retroactively revised to prevent significant over- or underpayments during the delay. The billing rate revision will reflect a decrement factor as determined by the government for historically disallowed amounts from prior years' audits.

The final rate is determined by dividing the negotiated allowable indirect cost by the negotiated allowable direct allocation base for each indirect cost pool. Unless certain costs are subject to a requirement of a legal decision, final rates are not subject to change. Final indirect rates are used to adjust billing rates on cost reimbursement contracts to arrive at the actual amounts of indirect costs that the contractor will be reimbursed for the applicable year. Final rates also provide the essential information for closing out cost-reimbursable contracts. Such contracts cannot be closed, with full payment of fee, until government approved final rates are established

In previous years, it was not unusual for the negotiation of final rates to take five years or longer. In the past, the settlement of final indirect rates was a low priority, with primary emphasis being placed on current contractual actions. The result was a very large backlog of contracts awaiting final closeout. Delays in negotiating final actual overhead rates have recently created exceptionally difficult problems because of the impact of defense mergers and acquisitions. For example, Lockheed merged with Martin-Marietta, who had acquired General Electric, who had acquired RCA. Yet, according to the Aegis Program Office, the final rates had not been settled for work performed

by RCA while the current work was being performed by Lockheed-Martin. Needless to say, it was extremely difficult for current contractor employees to locate records and to provide explanations relating to the allowability of indirect costs dealing with acquired contractors. Recall that it is the responsibility of the contractor to prove the reasonableness of costs. Within the past few years, DoD management has taken significant steps to deal with this problem. The big driver in focusing managerial attention on settlement of final rates has been changes in M accounts with the potential cancellation of program funds. (Refer to Chapter 6 for a discussion of the M account legislative issue.) The settlement of final indirect rates and the closing of old contracts is now a high priority issue in program offices. Both DCMC and DCAA are tracking this issue closely; it is one of their top priorities. For example, they have a very aggressive goal of reducing the backlog of unsettled years to one year by fiscal year 1997. In order to accomplish this goal they are often working multiyear reviews (e.g., examining two to three years of indirect costs at once instead of just one year at a time). In some cases, efforts are being made to isolate certain areas of disagreement and then settling the areas that are not affected. If necessary, the areas of disagreement will be settled later through the use of a reopener clause.

An often-asked question is: Which of the three indirect rates gives the government the most control over indirect costs? The answer, very definitely, is forward pricing rates. The establishment of forward pricing rates represents the only opportunity that the government has to affect indirect costs before the costs are incurred. From the government's perspective, it is often very difficult to argue that a cost is unreasonable when the contractor has already paid it. Also, while the negotiation of final rates is important for determining the final costs to be charged to cost-type contracts, it is not that sig-

nificant for firm-fixed-price contracts. The negotiation of final rates does not affect the price to be paid on firm-fixed-price contracts. The only value added with final rates for firm-fixed-price contracts is the managerial visibility that it provides for the negotiation of subsequent forward pricing rates. It is in the best interest of the government to stress indirect cost avoidance by rigorously pursuing the negotiation of forward pricing rates.

Tracking Of Indirect Costs

Once the contractor's fiscal year begins, the ACO (or the cost monitor, when applicable) will set up a system for tracking the contractor's actual indirect costs as they are incurred. In this regard, the leading thrust of the DCMC major initiative on overhead management is the intensified tracking of indirect costs by DCMC personnel. The primary objective of the intensified tracking is to alert the government team of any significant cost overrun problems and to gauge the reasonableness of forward pricing and billing rates. A comparison of actual versus target is made for both the indirect cost elements and the direct cost allocation bases for each indirect cost pool. The comparison is made each month for both the monthly incremental and year-to-date amounts. In order to avoid duplication of effort with the contractor's management control system, the government team should make special efforts to identify existing reports used by the contractor for controlling indirect costs. Typically, one would expect contractors to prepare monthly reports that summarize the actual allowable overhead rates on a monthly and year-to-date basis. Recall that the contractor is responsible for advising the government of any significant rate changes in order to comply with Truth in Negotiations Act requirements. The actual rates should be compared to forward pricing and billing rates and major differences analyzed to determine if the differences are temporary or permanent. Contractor analysis results should be disclosed to the ACO. If the contractor's budgetary and variance analysis procedures are considered to be adequate, the outputs from the contractor's system may be acceptable for use by the government team in monitoring the contractor's indirect costs. This method is the most economical and efficient way to monitor contractor indirect costs, since it precludes the preparation of special government reports.

Generally, in performing a variance analysis the government team will request a written explanation from the contractor for variances of: (1) indirect cost elements that are plus or minus 3% of the target and greater than \$10,000 and (2) direct cost allocation bases that are plus or minus \$100,000 of the target. Significant variances could lead to further analyses by the government team and could also lead to a formal functional review of some operational aspect of the contractor's business. The government team will determine whether any unfavorable trends are likely to continue for the remainder of the year. If the trend is likely to continue, the contractor will be notified that the current rates are no longer valid for forward pricing and billing purposes. Dependent upon the significance of the problem, a written corrective action plan may be requested from the contractor.

Some large contractors have recently started a practice of inviting DCMC personnel to their internal monthly overhead meetings. The purpose of these meetings is to address overhead problems quickly before large cost overruns are experienced. This practice significantly reduces the administrative requirements, as written reports and explanations may no longer be necessary in many instances. The practice also seems to build an open, trusting working relationship between the parties.

To avoid any management surprises for program offices, the government team should en-

sure that significant indirect cost problems, along with proposed contractor solutions, are immediately brought to the attention of the program office. Indirect cost problems could have a very significant financial impact upon program cost estimates.

Functional Reviews

A formal cost monitoring plan is required for those contractor locations when sales to the government for the next contractor fiscal year are expected to exceed \$100M for other than firmfixed-price and fixed-price-with-escalation contracts. A formal plan may be established by DCMC for contractors with less than the above criteria if the cost benefits to be derived from such a monitoring plan are considered to be warranted and the government's share of indirect costs allocable to cost and flexibly priced contracts is expected to be at least one-half of total indirect costs. The principal element of the plan is the selection of in-depth functional reviews to be conducted at the contractor's plant. These reviews represent a detailed analysis of contractor significant operations to evaluate the effectiveness of his policies, procedures, and practices followed in managing his operations.

The cost monitor has the responsibility for developing a fully coordinated plan for the next contractor fiscal year. The selection of functional reviews to be performed necessitates a risk assessment of areas in question and focuses on contractor operations that have the greatest potential for generating a savings to the government. Program offices and other government team members should be solicited for topics of concern in developing the monitoring plan, and they should be closely coordinated with the DCAA to prevent duplication of effort. The primary difference in the monitoring activities performed by DCMC and DCAA is that DCMC focuses more on the technical aspects of contractor operations while the DCAA focuses on the financial and accounting aspects. Later we will discuss the various reviews the DCAA performs that relate to indirect cost monitoring.

DCMC functional reviews address significant aspects of contractor operations such as material acquisitions, engineering activities, production operations, quality assurance, labor utilization, facilities engineering, environmental protection, and property and equipment utilization. The focus of the reviews is the avoidance of future costs. Government team members may recommend that in-depth functional reviews be undertaken to obtain significant savings when they observe the following: high excess usage rates, high inventory adjustments, excessive expediting, questionable labor realization and efficiency factors, indications of overstaffing, idle facilities, excess equipment, production bottlenecks, late deliveries, out-ofstation rework, and significant overtime.

Joint reviews have been encouraged to the maximum extent by the headquarters of both DCMC and DCAA. In some cases, contractor personnel may also participate jointly with government teams in performing in-depth functional reviews. Including contractor personnel on government review teams has been found to eliminate subjective interpretations and to provide a positive influence toward arriving at corrective action for deficiencies identified in a more unified manner.

Contractor Systems Reviews

The cost monitoring plan may contain certain large-scale, systems-oriented reviews that are required under certain conditions by the FAR, DFARS, or DoD Instructions. The pertinent regulations or instructions designate the responsible lead organization, such as the DCMC or DCAA, and specifically spell out the criteria for the reviews. The performance of required systems reviews often employ government spe-

cialists who are not on site at the contractor's plant. Consequently, government specialists from external organizations may be assigned on a temporary basis for a limited period of time, usually a matter of weeks.

The performance of the required systems reviews provides valuable feedback to government personnel on the reasonableness of contractors' indirect rates. Essentially, contractor functions being evaluated during systems reviews are functions that are performed by indirect-type employees. Therefore, in the performance of the reviews, information is obtained on the various tasks being performed by indirect personnel and an essential part of each review should be to evaluate whether the functions are being performed in an efficient and effective manner. Any significant indirect cost problems, such as overstaffing or uneconomical practices, should be discussed during the systems reviews.

The following required reviews and surveillance activities are very important to the monitoring of indirect cost and should be scheduled, if at all possible, to occur before forward pricing rate negotiations are completed.

Contractor Purchasing System Reviews

FAR 44.3 requires a contractor purchasing system review (CPSR) to be conducted for each contractor whose sales to the government, using other than sealed bid procedures, are expected to exceed \$25M during the next fiscal year. If there are indications of significant purchasing problems, the reviews may also be considered at smaller contractor locations. The CPSR is conducted by the cognizant contract administration organization at least every three years. A CPSR requires a comprehensive evaluation of a contractor's purchasing organization and practices. Upon completion of the review, the cognizant ACO is responsible for granting,

withholding, or withdrawing approval of the contractor's purchasing system.

Normally, a purchasing system analyst serves as the team leader and actually conducts the reviews on behalf of the ACO. For contractors with major defense systems, the review team includes specialists in engineering, production, quality assurance, and acquisition management functions. Recognizing that the material and subcontract content for a large defense production contract can often be very substantial, DoD is very interested in the efficiency and effectiveness of the contractor's purchasing system. Purchasing functions have a significant impact on indirect costs, as large numbers of contractor indirect employees are typically performing the functions of preparing requests for proposals, performing cost/price analysis, making source selection decisions, buying parts from vendors, administering subcontracts, arranging leases, and preparing and maintaining purchasing policies and procedures.

Estimating System Reviews

FAR 15.811 requires contractors to have adequate written procedures to document the utilization of reliable and efficient estimating techniques. A large defense contractor is subject to estimating system disclosure, maintenance, and review requirements if in its preceding fiscal year the contractor received DoD prime contacts or subcontracts totaling \$50M or more for which certified cost or pricing data were required. In addition, if a contractor received \$10M or more in such contracts and the contracting officer, with concurrence or at the request of the ACO, determines it to be in the best interest of the government (if for example significant estimating problems are believed to exist), the contractor may be subject to an estimating system review (ESR). The reviews are conducted every three years but may lengthened or shortened based on an assessment of the contractor's past experience and current vulnerability.

The cognizant DCAA auditor, on behalf of the ACO, serves as team leader in conducting estimating system reviews. Estimating system reviews can be very complex, and normally the ACO will designate quality control, production engineering, packaging, transportation, and other specialists to assist DCAA as members of the government review team. The ACO has the authority to approve or disapprove all or selected portions of the contractor's estimating system.

A contractor's estimating system includes his policies, procedures, organization, estimating methods, and work measurement techniques. Estimating functions are performed predominately by indirect-type employees and the functions typically will have a significant impact upon indirect costs. In conjunction with performing estimating system reviews, government technical specialists will normally examine production processes, shop practices, machine loadings, time and motion factors, and other areas. The continuing performance of estimating system reviews on a cyclical basis provides the government with significant insight into the contractor's ability to manage his indirect costs. The scope of the estimating system review also includes an analysis of the methods used to establish reliability in the sales forecast and the extent to which the forecast data are reflected in indirect cost projections. It also includes an analysis of the contractor's plans relating to the acquisition of new and improved capital equipment, which will generate large depreciation- or amortization-related indirect costs.

Compensation System Reviews

FAR 42.302 requires the ACO to review the contractor's compensation system. However,

DCAA is designated as the responsible organization within DoD for actually performing compensation system reviews (CSRs) as separate assignments. DCAA makes recommendations to the ACO, who is responsible for negotiating indirect rates. It is DCAA policy that an employee compensation system review be performed at those defense contractor locations where in the preceding contractor fiscal year, the contractor received at least \$50M in government sales under negotiated prime contracts and subcontracts for which such sales represented at least 10% of the total sales volume. Compensation system reviews are scheduled every three years and to the extent possible are scheduled to occur prior to major proposal actions. A CSR represents a complete evaluation of the contractor's employee compensation system including policies, procedures, practices, and costs. The review is made to determine whether the compensation structure conforms to sound business practices and whether employee compensation costs meet the tests of reasonableness in accordance with FAR 31.205-6. The scope of the CSR includes executive compensation, bonuses, salary merit increases, incentive awards, employee stock options, offsite pay, severance pay, cost of living allowances, health and life insurance, pensions, retirement, annuities, and other fringe benefits. Of course, the scope of the review includes both indirect and direct employees. Due to the highly technical nature of defense work, labor costs are usually significant cost drivers for both direct and indirect costs.

Contractor Insurance and Pension System Reviews

DFARS 242.73 requires a contractor insurance and pension system review (CIPR) for each contractor whose qualifying sales to the government exceeded \$40M during the contractor's preceding fiscal year. Qualifying sales are sales for which certified cost or pricing data were

required. A CIPR is required at least every two years for contractors who continue to meet these requirements. A more or less frequent cycle may be appropriate under certain circumstances, such as prior to a major contract award or subsequent to a merger or divestiture. DCMC is the designated organization responsible for performing the reviews, which are conducted by joint teams under the direction of a DCMC insurance and pension specialist. Normally, the joint team will includes at least an actuary, cost accounting standard specialist, and the cognizant DCAA auditor. If major issues are encountered, an actuary from the DCMC Overhead Center may join the team. At the completion of the reviews, recommendations are made to the ACO, who is responsible for determining the reasonableness of the contractor's insurance and pension costs.

A CIPR represents a comprehensive and indepth review of a contractor's insurance programs, pension plans, and other deferred compensation plans. The objective is to determine whether the contractor's plans are in compliance with the FAR and contract clauses, which may require a certain type of insurance with specific coverage. An analysis is made of the contractor's insurance expenses for employers liability, product liability, property and casualty, employee group, and workmen's compensation. The analysis of pension expenses includes employee savings and thrift plans as well as normal pension plans. Insurance and pension expenses are usually very large contributors to indirect expenses. At the present time, this is an area of very strong emphasis on the part of DCMC due to the increasing level of contract terminations, mergers, acquisitions, and consolidations ongoing as companies downsize. Of particular note are the issues involving pension expenses; they are not routinely encountered, can become very complex, and involve very large amounts of indirect costs.

Material Management and Accounting System Reviews

DFARS 242.72 requires that a large business contractor is subject to material management and accounting system (MMAS) disclosure, demonstration, and maintainability if in its preceding fiscal year the contractor received DoD prime contracts or subcontracts totaling \$70M. In addition, if this amount is \$30M or more and the ACO determines it to be in the best interest of the government (for example if significant MMAS problems are believed to exist), a review may be performed. The cognizant contract administration and audit activity jointly manage programs for evaluating material management and accounting systems. The ACO appoints a team leader and ensures the team includes appropriate functional specialists, such as an engineer, industrial specialist, property administrator, and auditor. The reviews are conducted every three years, but the ACO may lengthen or shorten this period based on a risk assessment of the contractor's past experience.

A contractor's MMAS sets forth the management controls for identifying requirements, initiating procurements, and maintaining materials necessary to support production operations. It also provides accounting information necessary for product costing and inventory pricing purposes. The personnel who are performing functions relating to materials management are often classified as indirect employees and these expenses are often major cost drivers of indirect costs. For example, contractor employees are engaged in expediting parts, controlling inventory, analyzing material problems, and warehousing. In addition, these reviews focus on many management issues that affect indirect costs, such as excess inventory, inventory shortages, rework, scrap, and returned material. Further, the accuracy of contract material charges (whether they are direct or indirect) are covered in these reviews.

Earned Value Management Systems

DOD Regulation 5000.2-R, Appendix VI, provides criteria for evaluating contractors earned value management systems (formerly referred to as cost and schedule control systems) on certain large, risky, cost-based weapon system contracts. Industry standards based on "best practices" have recently been developed for earned value management systems. As an initiative under acquisition reform, these standards have been accepted by the government as a replacement for the DoD cost schedule/control systems (CS/CS) criteria. Earned value management is a tool that allows both contractor and government program managers to have visibility into technical, cost, and schedule progress on complex projects. Essentially, it is an analytical technique providing for the earning of a budget value as each unit of work is completed under a contract. It is a primary function of program management that places strong emphasis on the planning and integration of technical, cost, and schedule aspects of a program to support decision making by program managers. Indirect cost management is an important part of this.

DoD applies the industry criteria via a contractual clause on contracts that have an estimated RDT&E cost of \$70M or more, or estimated procurement cost of \$300M or more. Below the mandatory thresholds, program mangers may use less formal techniques consistent with anticipated risk. It should be noted that DoD sets minimum earned value management system requirements for firm-fixed-price contracts, time and material contracts, or contracts that consist mostly of level-of-effort-type work only on an exception basis. The primary output of the contractor's earned value management system is a monthly cost performance report (CPR). which identifies contract schedule and cost variances along with contractor comments on significant problem areas, reasons for variances, and planned corrective actions. Typically, the monthly CPR for major weapons systems provides for the reporting of indirect expenses, with a requirement that the contractor analyze significant variances between budgeted and actual indirect rates. Most important, program managers want to identify as early as possible any negative cost or schedule changes that will affect the performance of their programs.

Today, most major defense contractors' earned value management systems have met government requirements. Over the past several years, contractors have completed a process of review, demonstration, and validation of their systems. For those few remaining contractors who do not have approved systems, the government performs an Initial Compliance Evaluation (ICE) to assess the contractor's proposed system against the industry standards. After approval, the government maintains surveillance to ensure continued satisfactory system operation. The DCMC carries out surveillance using a multifunctional team approach that combines production and manufacturing, engineering, quality assurance, and program support groups. Program management offices and DCAA provide support to DCMC as required. After the initial acceptance of the contractor's system, no further formal system evaluation reviews are conducted unless there is a serious need "for cause" determined by the government. If required, a post-acceptance review (PAR) would be performed but it would be tailored and limited in scope to address only specific issues, such as untimely cost data, inaccurate schedule data, or failure to address technical problems.

It should be noted that within six months of the award of a contract meeting the criteria discussed above, an Integrated Baseline Review (IBR) is conducted. This review is not a contractor systems-oriented review, but a formal review conducted by the government program manager and technical staff, jointly with their

contractor counterparts, to verify the technical content and the logical sequencing of the work to be performed for the Performance Measurement Baseline (PMB). An IBR is also performed when work on a production option of a development contract begins or, at the discretion of the program manager, when a major modification to an existing contract significantly changes the existing performance management baseline.

The industry standard contains some 32 specific criteria for an acceptable earned value management system. For analysis purposes, the standards have been broken out by nine business "process groups." One of the business processes is the the "indirect management" process. This process group provides the following major requirements for contractor earned value systems that specifically relate to how the contractor manages indirect costs.

- The managerial positions responsible for establishing and controlling indirect budgets should be clearly identified in the contractor's organizational structure.
- The PMB should contain budgets for indirect costs at the level appropriate for project or company management.
- The projected indirect costs, contract work breakdown structure, and organizational levels should be established by a rational, traceable budgeting process.
- The contractor's disclosure statement should define the contractor's indirect management process. It should include a definition of indirect expenses, description of overhead pools, and items of cost assigned to each overhead pool.
- Projected indirect rates should be adjusted in a timely manner to reflect; (a) changes in the

current or projected base, (b) the level of overhead expenditures, and (c) the overhead structure. The Earned Value System (EVS) should use the most current overhead rates to establish the PMB

- The contractor's accounting system should provide for the summarization of indirect costs from the point of allocation through the Contract Work Breakdown Structure (CWBS) and Organizational Breakdown Structure (OBS) to the total contract level.
- Overhead rates should be updated frequently enough to ensure a realistic monthly allocation of indirect costs without significant adjustments to performance measurement information
- The evaluation of variances between indirect budgets and costs should initiate management action to correct the causes of the variances.
- Indirect variances should be identified by element of expense.
- To ensure that the most accurate rates are used for estimate at completion (EAC) purposes, the contractor's system should base these rates on: historical experience, contemplated management improvements, projected economic escalation, and anticipated business volume.

Government personnel working in the earned value management area obtain considerable knowledge about the efficiency with which the contractor performs many functions throughout his plant that are required to be integrated by program management. Many of these functions are classified as indirect by contractors and may be significant cost drivers of indirect costs. Therefore, a resulting additional benefit to government personnel evaluating earned value management is that an awareness is created of the necessity for the performance of

certain indirect functions and valuable insight is gained into the efficiency with which the indirect functions are being performed.

DCAA Operational Audits

The DCAA, as a separate agency under the direction and control of the DoD Comptroller, performs numerous functions relating to the monitoring of indirect costs. The placement under the organizational control of the DoD Comptroller provides an internal control measure for DoD management because of the separation of an independent audit advisory function from the acquisition management function. DCAA conducts all contract audits for DoD and provides accounting and financial advisory services for the negotiation and administration of contracts and subcontracts. Based on discussions with DCAA personnel, DCAA management has recently given executive emphasis to their operational auditing work. Operational audits are basically the same as the cost monitoring functional reviews conducted by DCMC. The purpose of an operational audit is to evaluate the economy and efficiency of specific contractor functions or operations. The audits may result in the identification of opportunities for cost reduction and may provide benefits for future forward pricing negotiations.

The DCAA's primary focus in selecting where to conduct operational audits is to monitor overhead cost control, particularly at the largest contractors. Risk assessments are performed prior to commencing the audits to ensure that significant cost savings potential is present. The DCAA has recently reported successful operational audits that resulted in significant reductions in indirect costs. The audits were in the areas of elimination of idle facilities and reduction in floor space through cancellation of leases, reduction in number of computer service centers, make-versus-buy analyses, cost containment measures regarding employee

health care and workmen's compensation costs, improvement in supplier rating systems, sharing of "best practices" with subcontractors and suppliers, and use of video conferencing in lieu of air travel . DCAA personnel report that they are getting increased cooperation from contractors by performing the operational audits in a constructive, noncritical, team-oriented manner. As an example, a recent joint DCAA/DCMC operational audit in the information systems area indicated that considerable savings of approximately \$6M could be achieved if certain work was performed by software vendors rather than by in-house personnel. After completion of the joint DCAA/ DCMC operations audit, the contractor performed a larger scale review and found that \$12.5M rather than \$6M could in fact be saved with further elimination, reduction, consolidation, and outsourcing of certain work.

DCAA Systems Reviews

In addition to the increased focus on overhead in performing operational audits, the DCAA performs as a normal part of its contract auditing function a number of pertinent contractor systems-oriented reviews. Although the specific objectives of the reviews are not to analyze the amount of indirect costs, the systems reviews are very relevant to the monitoring of indirect costs. For example, the reviews are oriented toward evaluating the effectiveness of large systems, such as electronic data processing, accounting, billing, etc., that are used for efficiently managing all work at contractor plants. These systems are usually uniquely designed by the contractor based on the nature of its business and the products it makes. In the process of performing these reviews, the DCAA must perform an evaluation of the effectiveness and efficiency of the performance of numerous functions. Any functions that are unnecessary, duplicative, or inefficient should surface. Since contractor management systems by their nature relate to the total business, the people working in this area are primarily indirect or overhead personnel. Consequently, from the government's perspective, the performance of these reviews makes a very strong contribution toward the monitoring of indirect costs. For example, if the electronic processing or accounting functions are overstaffed, it should become apparent when the large-scale reviews are conducted.

It is DCAA's policy that each relevant accounting or management system that has a significant impact on government contract costs be reviewed on a cyclical basis. The frequency of the reviews is based on a risk assessment; however, generally they are conducted every two to four years. While the nature and extent of the audit effort depends upon contractor size, amount of government business, and risk assessment, the coverage normally includes the following contractor systems reviews.

Accounting System Reviews

Contractors receive various cost reimbursement and incentive contracts, which provide for payments based on costs or on a percentage or stage of completion. Therefore, they must establish and maintain an accounting system that provides assurance that cost accounting information is reliable and that the risk of misallocations and mischarges are minimized. Contractors' cost accounting systems should be committed to writing and should provide a complete description of all cost accounting practices affecting government contracts. The requirement for a disclosure statement, as explained in Chapter 7, should satisfy this requirement for those contractors covered by Cost Accounting Standards. Contractors should also have policies and procedures for ensuring that any changes made in cost accounting practices are properly disclosed to the government along with the related cost impact on government contracts.

In the performance of accounting system reviews, DCAA conducts numerous tests that tie in specifically with the monitoring of indirect costs. These tests cover an evaluation of the contractor's methods of:

- assigning costs as direct or indirect to cost objectives;
- ensuring that indirect costs are accumulated in logical, homogeneous cost pools;
- determining that allocation bases used by the contractor for the allocation of indirect costs are equitable;
- ensuring that items of the same nature as those charged as direct costs are not included in the indirect cost pools;
- evaluating the adequacy of functional or departmental breakdown of indirect expenses;
- ensuring that costs are properly classified as allowable or unallowable:
- ensuring that there is clear identification of personnel responsible for preparing and approving business transactions; and
- evaluating the currency of the system from a technological modernization perspective.

Electronic Data Processing System Reviews

The extensive use of computers and other electronic data processing (EDP) equipment by defense contractors requires that DCAA review from an internal control perspective the EDP organization, functions, and control procedures used throughout contractor's operations. EDP systems reviews are becoming more and more significant due to the increased use of computers, increased need for software, and constantly changing technology. EDP systems are major

cost drivers because of the very large costs associated with equipment, software, and personnel. In performing EDP system reviews, the DCAA becomes very familiar with the many functions performed and how effectively they are performed. For example, an EDP system review would include an evaluation of hardware acquisition, software development work, systems tests, computer operations, database administration, security, system maintenance, and usefulness of output information. The EDP systems review is of tremendous benefit in evaluating the reasonableness of contractor indirect costs, as these major costs are primarily indirect in nature. In fact, this has been an area of considerable importance in recent contractor actions to reduce overhead costs through the combining of computer center operations and the standardization of systems through adoption of best practices. In addition, a very fertile area for possible reduction in indirect costs is the analysis of the purchase of computer services from outside vendors versus in-house performance by contractor computer center personnel.

Contractor Budget And Planning System Reviews

DCAA's primary objective in conducting budget and planning system reviews is to establish that a sound budgetary system is operating for company planning and control purposes. The reviews are performed at least every three years for those contractors receiving DoD prime contracts or subcontracts of at least \$50M that required the submission of cost or pricing data. These reviews may also be considered at smaller contractor locations where there are indications of significant budgeting system problems. One would expect contractors to prepare budgets for all major activities within the contractor's plant that will have an impact on government contracts. A major consideration in performing these reviews is whether the reports to the government on major contracts for weapon systems are consistent with the contractor's latest budgetary data used for internal management purposes. In addition to ensuring that managerial objectives are met, the contractor's budgetary system provides valuable data for use in developing estimates, particularly indirect cost projections and cost allocation base estimates.

Labor System Reviews

DoD weapons systems require a high degree of engineering and consequently labor is usually a very significant cost that is charged to defense contracts. In addition, direct labor is often used as the base for allocating indirect costs, particularly in engineering areas. Therefore, DCAA places considerable audit emphasis on the management controls exercised by contractors for ensuring that labor costs charged to DoD contracts are in compliance with cost accounting standards, generally accepted accounting principles, and contract terms. Usually, a defense contractor could expect to have the DCAA perform "floor checks" on a regular basis as a component of their internal control reviews. In addition to evaluating the adequacy of the contractor's labor recording system and assessing control risk relating to allocability and allowability of labor costs, the DCAA considers these reviews to be very important from an indirect cost monitoring standpoint. In the process of performing the reviews, the government personnel are on the production floor and continuously observing numerous contractor activities. The on-site observations can provide leads on questionable levels of indirect costs, such as idle personnel, equipment, or facilities. These areas would then be subject to examination in more detail with an operational audit.

Billing System Reviews

DCAA performs reviews of contractor billing systems in order to ensure that vouchers sub-

mitted by the contractor for payment under DoD contracts are prepared in accordance with applicable regulations, advanced agreements, and specific contract terms. Since it is not practical to audit billings other than on a test basis, the contractor should have controls in place for applying the proper indirect expense rates in the billings. If significant deviations occur between billing rates and rates that are actually being incurred during the year, adjustments should be promptly made to the billing rates. Systems should be in place to ensure that at year's end the amount of indirect costs reimbursed to the contractor is as close as possible to the actual allowable billing rates.

DoD Should-Cost Reviews

The concern for increased indirect costs due to the decline in defense business has resulted in DoD management actively pursuing the use of "should-cost" reviews as a means to help drive down contractor indirect costs. Should-cost reviews can be oriented toward achieving cost avoidances for both direct and indirect costs. Many government procurement personnel express the opinion that should-cost reviews have been found to be particularly beneficial when they were performed in conjunction with the evaluation and negotiation of major sole source proposals or major forward pricing rate proposals.

A should-cost review is a specialized form of cost analysis that is used to challenge a contractor's management and operating systems. Should-cost reviews do not assume the use of the contractor's existing workforce, methods, facilities, or management and operating systems. It represents a large-scale, penetrating, and in-depth analysis requiring a number of highly experienced government personnel. Historically, should-cost reviews have been primarily of two types: program or overhead should cost reviews. The program should-cost must be performed in certain circumstances

before the award of a major systems contract. These circumstances are: when a contract expected to exceed \$100M is to be awarded on a sole-source basis, there are future year production requirements for substantial quantities of like items, some initial production has already taken place, major changes in the system are unlikely, or the items being acquired have a history of increasing costs. On the other hand, overhead should-cost reviews are large-scale reviews focus on indirect costs relating to the contractor's entire operations rather than to a specific program. It includes an analysis of significant indirect cost drivers as well as the appropriateness of the various direct allocation bases for the indirect expenses. At the present time, DCMC considers the primary drivers of overhead to be indirect labor, fringe benefits, computer-associated costs, and facilities-related expenses. Considerable effort in overhead should-cost reviews is directed to an evaluation of the estimate of the contractor's total business base, including defense and commercial programs. The overhead should-cost analysis is intended to challenge the contractor's existing manpower, methods, facilities, and management control systems that are classified as indirect expenses. Consequently, it is essential that overhead should-cost reviews employ integrated teams of government engineering, contracting, contract administration, pricing, and auditing personnel from both local and regional DCMC and DCAA offices as well as personnel from DoD program offices. Because of the comprehensive nature of overhead should-cost reviews, staffing requirements have in some cases exceeded 50 team members.

Recent changes to the DFARS provide that the government should consider performing an overhead should cost review of a contractor's business segment when:

• projected annual sales to DoD exceed \$1 billion;

- projected DoD business exceeds 30% of the contractor's total business;
- the level of sole-source DoD contracts is high;
- a significant volume of proposal activity is expected;
- production or development of major weapons system or program is anticipated; and
- contractor cost reduction initiatives appear inadequate.

Generally, overhead should cost reviews are not performed more frequently than every three years.

Overhead should cost reviews are extremely unpopular with industry primarily because they specifically relate to indirect costs, which are often considered by management to be discretionary. In addition, the government often requests access to the contractor's total business operations, which includes commercial business as well as specific government programs or contracts. Overhead should cost reviews are also very resource-consuming for both the contractor and the government. The large amount of contractor data that is required to be provided to the government for overhead should-cost reviews is considered to be highly sensitive, proprietary information and must be closely protected from disclosure to unauthorized personnel.

One current primary objective of the DCMC is to strengthen its capabilities for monitoring indirect costs. Of particular importance is the strengthening of its ability to manage overhead should-cost reviews. Contractors selected as candidates for overhead should-cost reviews are based on recommendations received from several sources. DCMC practices provide for the prioritization of the overhead should-cost re-

views at contractor locations based on a risk assessment conducted with input from major buying activities as well as from local contract administration and audit personnel. A risk assessment is conducted for those contractors who have flexibly priced contracts with the government that in total are greater than \$100M. Many factors are considered in the risk assessment. In addition to the amount of business that is done with DoD on a flexibly priced basis, DCMC is also concerned with sales trends in order to target those contractors offering the greatest opportunity for significant cost reductions. DCMC also considers the volume of planned proposals—particularly those for development or production work. And DCMC criteria includes a consideration for the current status of the adequacy of contractors' management control systems. For example, certain systems such as the contractor's estimating system, purchasing system, earned value system, and accounting system may require government review and validation. Consideration is also given to the adequacy of the contractor's overhead cost reduction efforts and to what extent such contractor efforts are shared with the government. At the present time, due to the large amount of merger and acquisition activity in the defense industry, a significant factor considered by DCMC is whether or not the contractor has been involved in a recent major restructuring. If so, an overhead should-cost review could result in a duplication of effort as the government could be in the process of evaluating the contractor's cost savings plans resulting from restructuring activities.

Recent trends seem to be toward the concept of tailoring all should-cost reviews to the maximum extent to the specific concerns of the DCMC customer, the program offices, and buying commands. For example, the scope of a should-cost review could be only a specific product or specific indirect cost driver as opposed to a more encompassing program or to-

tal overhead cost review. The trend also seems to be toward the use of smaller government teams with a reduced number of more experienced people with strong backgrounds in analyzing indirect costs.

Correction Of Problems

The ACO is responsible for ensuring that contractors are responsive to recommendations made by government personnel in their indirect cost monitoring efforts, which are identified in cost monitoring reviews, operations audits, and overhead should-cost reviews. If the contractor should disagree with recommendations made by government personnel, they will respond in writing to the ACO with their rationale for disagreement. Otherwise, the contractor will submit a corrective action plan detailing the actions to be taken to correct any deficiencies or plans to reduce indirect costs. The ACO has tremendous clout in monitoring indirect costs; he could, in very serious situations, suspend progress payments or reimbursement of costs based on the estimated cost risk to the government. In addition, on a continuous basis, the ACO considers the status of all government monitoring efforts during the negotiation of indirect rates for forward pricing and billing rate purposes.

Program Office And DCMC Relationship

Program managers and their staffs cannot effectively manage the acquisition of a weapons system unless they understand their contractor's cost structure and stay abreast of the status of their contractor's total business. Program office personnel should to the maximum extent use the expertise available from the government cost monitoring staff who are very familiar with the contractor's operations. The ACO, who is a member of the DCMC, is designated as the single point of contact for the government at the contractor's plant. The ACO has the respon-

sibility of keeping the procurement contracting officer and program manager informed of the current status of indirect costs and any potential major problem areas that could affect cost performance.

The ACO should periodically brief program offices on the contractor's indirect cost control system, methods used by the government to monitor indirect costs, current status of actual indirect rates compared to forecasted rates. current status of forward pricing rate negotiations, current status of the settlement of prior year actual rates, the status of any contractor special projects to reduce indirect costs, organizational changes, business process changes, cost monitoring reviews, operations audits, and the current status of any major indirect cost issues (i.e., environmental costs, restructuring costs, executive compensation, health care benefits). In addition, the ACO should request input from the program offices as to any concerns that they may have about the contractor's indirect costs. These concerns should then be strongly considered in performing risk assessments and in making decisions on the areas that should be examined in more detail in conjunction with selecting cost monitoring reviews or operational audits. The briefings should also serve to emphasize to program managers the need for programmatic input regarding the contractor's forecasted business base. Program office personnel need to be sensitive to overhead issues and recognize when they should convey to the ACO certain information that could have a significant impact on indirect costs rates. The complexity of controlling indirect costs necessitates the sharing of information on a continuing basis between the program offices, DCMC, and DCAA as well as with contractors. One should never forget that the program manager is a major customer of the contractor and has tremendous clout in dealing with the contractor. The program manager should encourage their contractors to be very aggressive in managing

indirect costs. In this regard, some program managers have recently placed contractual in-

centives on the contractor's ability to control indirect costs.